CRITICAL CARE PATIENT CARE REVIEW

2LT Amber A. Burg

June 2000

Patient Information

- Identification: RS
- 45 year old Caucasian male
- Date of Admission: 26 May 2000
- Chief Complaint: fever
- Diagnosis: septic shock (leading to multiple organ failure, including kidneys, lungs, and liver)
- WRAMC MNT Care Plan: ARF, Parenteral Nutrition

Septic Shock

- Definition
- Etiology
- Symptoms
- Treatment
- Prognosis
- Nutritional Implications

Objectives of Nutrition Support

- Detect and correct preexisting malnutrition
- Prevent progressive protein calorie malnutrition
- Optimize the patient’s metabolic state by managing fluid and electrolytes

Pt's Medical Treatment

- Past medical history: Parkinson's x 15 yrs
- Past surgical history: deep brain stimulators inserted in April 2000, removed 28 May
- Family History: lives at home with wife in NJ
- Current tx: hemofiltration, antibiotics, ventilation, chest tube

Nutrition History

- Diet at home: regular, was eating well prior to admission to hospital in NJ
- Admission diet order: NPO
- Current diet order: Nepro/TPN
  - Nepro was not tolerated well
  - TPN ordered, recently started

TPN Orders

- Original TPN order:
  - 2500 kcal, 90 gm PRO, 440 gm dex, 64 gm FAT
- New TPN order:
  - 2000 kcal, 90 gm PRO, 482 gm dex, 0 gm FAT
  - Total kcals decreased to avoid giving too much CHO/min
  - Fat removed b/c of high triglyceride levels
  - Other changes: Potassium removed b/c lab values going up, calcium increased b/c ionized calcium levels decreased

Anthropometrics

- Height: 5’ 9”
- Weight: estimate about 93 kg for estimating needs (current weights are not accurate due to total body edema)
- UBW: 210-220 lb
- DBW: 151-163 lb (MHWT)
- % DBW: 129%

Medications

- Erythromycin: antibiotic; used to increase GI peristalsis
- Dopamine: inotrope; maintains blood pressure
- Levophed: increases blood pressure for better circulation
- Multiple other antibiotics

Labs – 1 June

- Ionized Ca: 1.1 mmol/L (1.13-1.32 mmol/L)
- Albumin: 2.1 g/dl (3.2-5.0 g/dl)
- WBC: 24 th/mm^3 (4.8-10.8 th/mm^3)
- BUN: 72 mg/dl (8-22 mg/dl)
- Creat: 6.4 mg/dl (0.5-1.5 mg/dl)
- PO4: 4.3 mg/dl (2.4-4.4 mg/dl)
- T Bili: 12 mg/dl (0.2-1.4 mg/dl)
- Trig: 671 mg/dl (35-160 mg/dl)

Nutritional Diagnostic Statement

- Patient is currently at nutritional risk due to low/no intake x 10 days, sepsis, multiple organ failure and questionable GI function as evidenced by recent high gastric residuals.

Nutritional Needs

- Calorie needs: 2500 kcal/d
  - 25-30 kcal/kg/d using estimated dry wt of 93 kg
- Protein needs: 80-90 g/d
  - 0.8-1.0 g/kg/d
  - Actual needs may be more, but these numbers are used b/c of renal failure without hemodialysis

MNT Care Plan

- Goal of Therapy: To reduce risk of mortality and morbidity associated with sepsis.
- Recommendations:
  - Continue to attempt to advance Nepro to goal rate of 55 cc/hr.
  - If enteral feeding is not meeting >50% of needs, initiate individualized TPN.
- Plan: Continue to monitor progress, labs, tolerance, etc. and make further recommendations as needed.

Outcomes of Care

- Potential Health Outcomes
  - Survival, increased immune system and organ function
- Potential Resources Saved
  - Money for TPN (if tube feeding is continued), decreased hospital stay, decreased readmissions

QUESTIONS???